

Hanging in the Balance: *The uncertain future of the Wild Worcester Range*

Zack Porter

Executive Director, Standing Trees

zporter@standingtrees.org, 802-552-0160





[Home](#) [Forests for the Future](#) [Threats to Public Forests](#) [Get Involved](#) [Blog](#) [About](#) [Donate](#)

Standing Trees works to protect and restore forests on New England's public lands.





Vermont Sets Ambitious Goal to Save Half of the State for Nature

New biodiversity measure aims to conserve 50 percent by 2050



VERMONT CONSERVATION DESIGN

PART 2: NATURAL COMMUNITIES AND HABITATS
TECHNICAL REPORT



March 2018

Robert Zaino, Eric Sorenson, Doug Merin, Jens Hille – Vermont Fish and Wildlife Department
Keith Thompson – Vermont Department of Forests, Parks and Recreation



Natural Solutions

INITIAL VERMONT CLIMATE ACTION PLAN

Vermont Climate Council
DECEMBER 2011

Phosphorus TMDLs for Vermont Segments of Lake Champlain

June 17, 2016



2018 Vermont State Hazard Mitigation Plan

Making Vermont safer and more resilient in the face of climate change and natural disasters



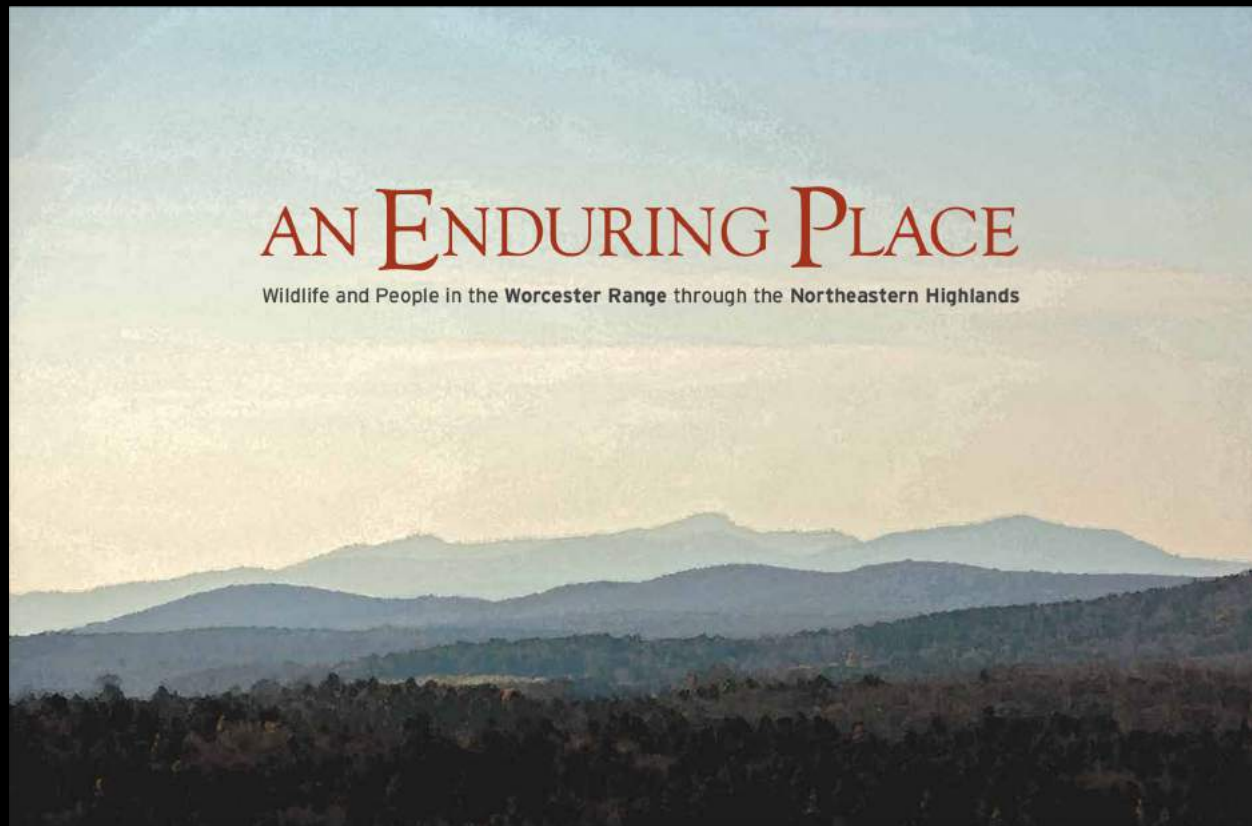
It's Not Just Climate: Are We Ignoring Other Causes of Disasters?

Climate change is increasingly seen as the cause of natural catastrophes, from floods to famines. But a growing number of scientists are cautioning that blaming disasters solely on climate overlooks the poor policy and planning decisions that make these events much worse.

BY FRED PEARCE · FEBRUARY 8, 2022



- In 150 years, *tree cover* has returned to much of New England. But we are a long way from *forests*.
- Less than 1/10 of 1% of New England's landscape is old-growth forest
- Just .3% of New England forests are over 150 years old
- Trees may be renewable but forests are not



“The Worcester Range is the only place that’s left in central Vermont that is large in scale and completely unfragmented.”

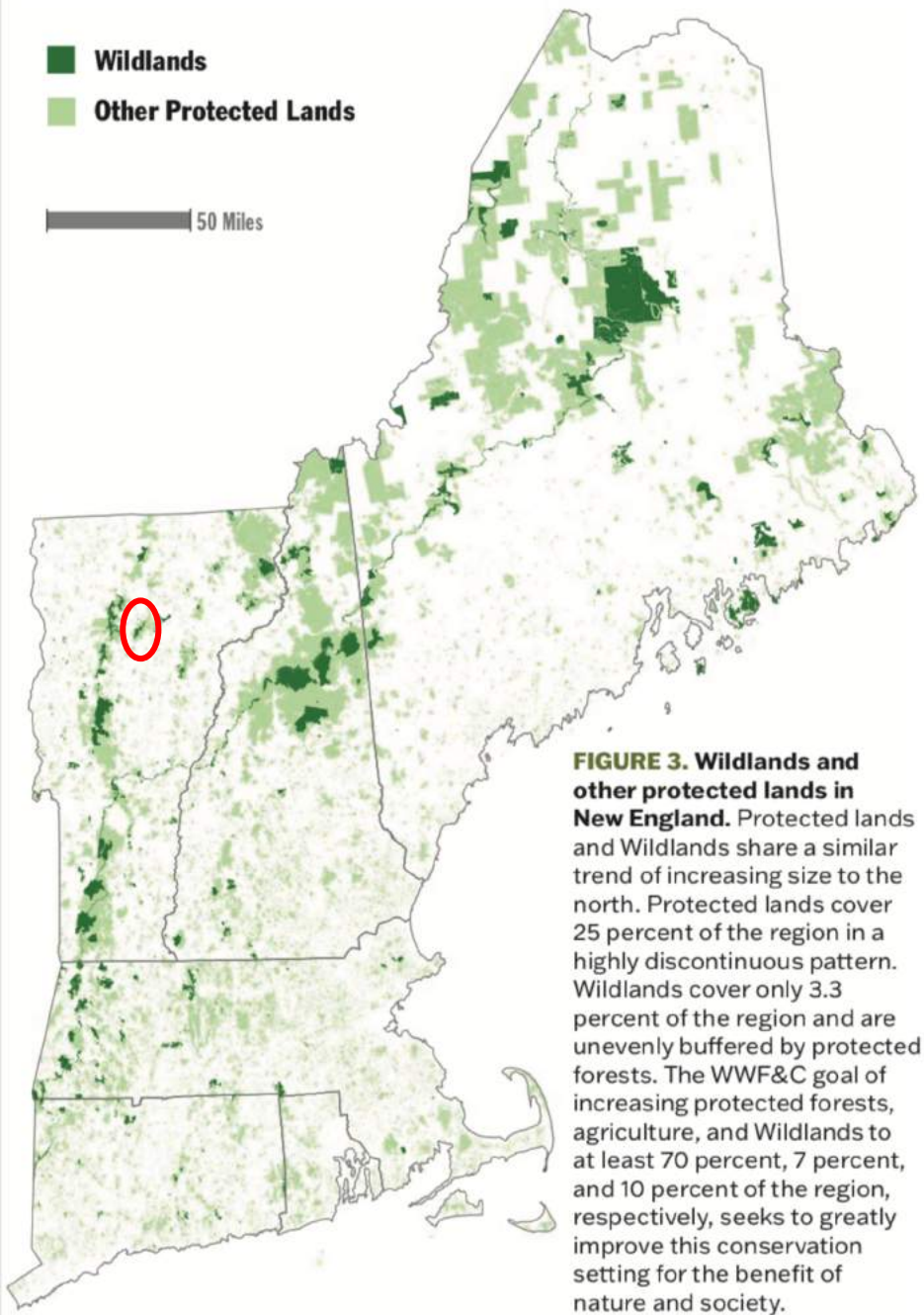
“The Worcester Range is...unique, in central Vermont, because it remains almost completely wild and undeveloped.”



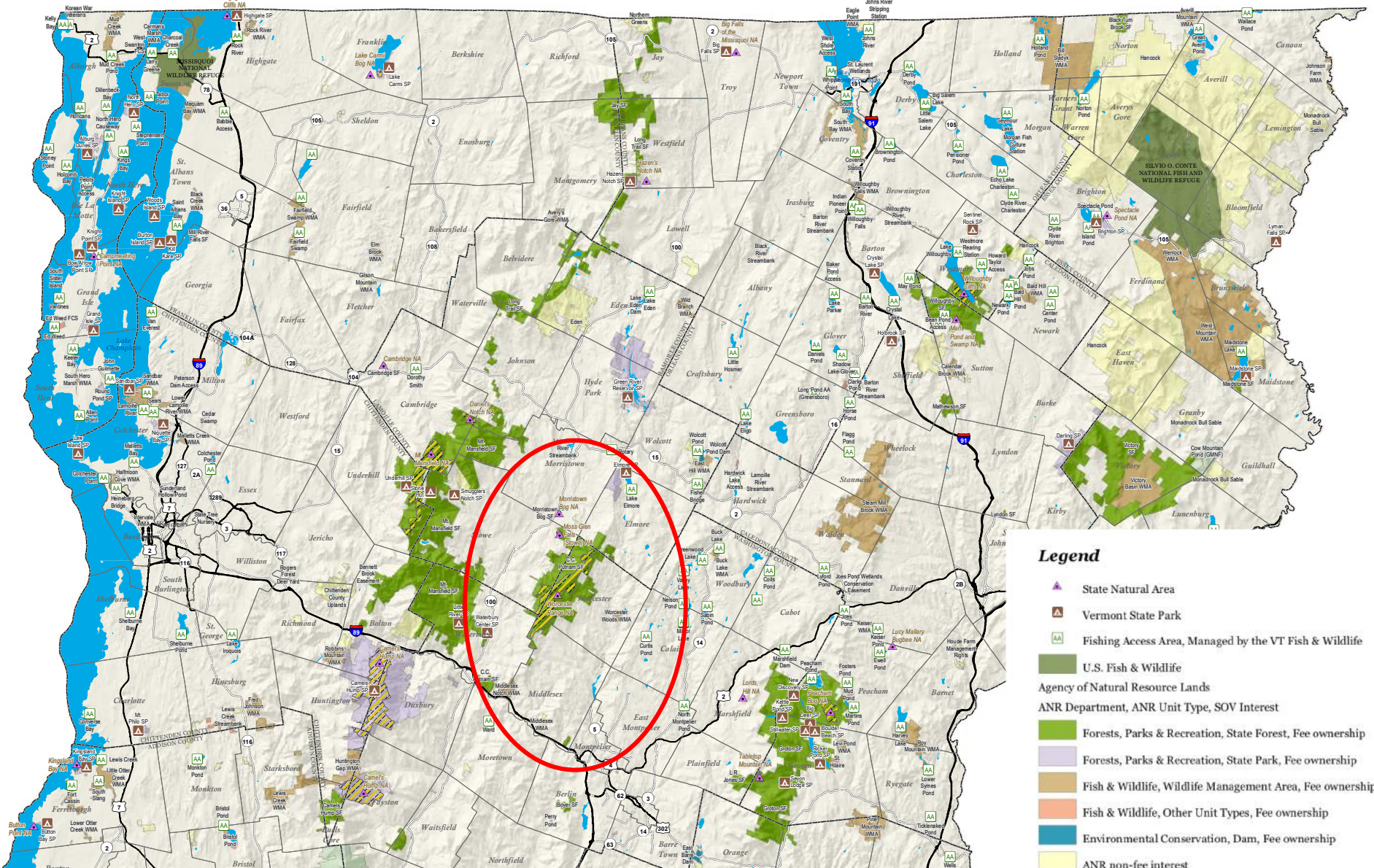
What's at stake in the Worcester Range:

- First comprehensive plan for 19,000-acres of state land that is a functional wildland today
- "The WRMU is of exceptional ecological importance at local, statewide, and regional scales" (Draft LRMP p15)
- "Dominant forest cover of relatively old and large trees" of 90-120 years (Draft LRMP p30)
- "Given the expansiveness of the major forest types comprising the WRMU, the property supports the range of bird and mammal species that depend and even thrive on the interior forest that can't easily be found elsewhere in the state" (Draft LRMP p30)

Wildlands and Other Protected Lands in New England



- About 25% of New England and Vermont are conserved from development, but...
- Only 3% of Vermont and New England are managed so that forests will grow old, compared to 10% of New York.



Legend

- State Natural Area
- Vermont State Park
- Fishing Access Area, Managed by the VT Fish & Wildlife
- U.S. Fish & Wildlife

Agency of Natural Resource Lands

ANR Department, ANR Unit Type, SOV Interest

- Forests, Parks & Recreation, State Forest, Fee ownership
- Forests, Parks & Recreation, State Park, Fee ownership
- Fish & Wildlife, Wildlife Management Area, Fee ownership
- Fish & Wildlife, Other Unit Types, Fee ownership
- Environmental Conservation, Dam, Fee ownership
- ANR non-fee interest

Other Public Land

- Green Mountain National Forest
- National Recreation Area (GMNF)
- Wilderness Area (GMNF)



Statutory authorities and responsibilities of VT ANR:

10 V.S.A. § 2603



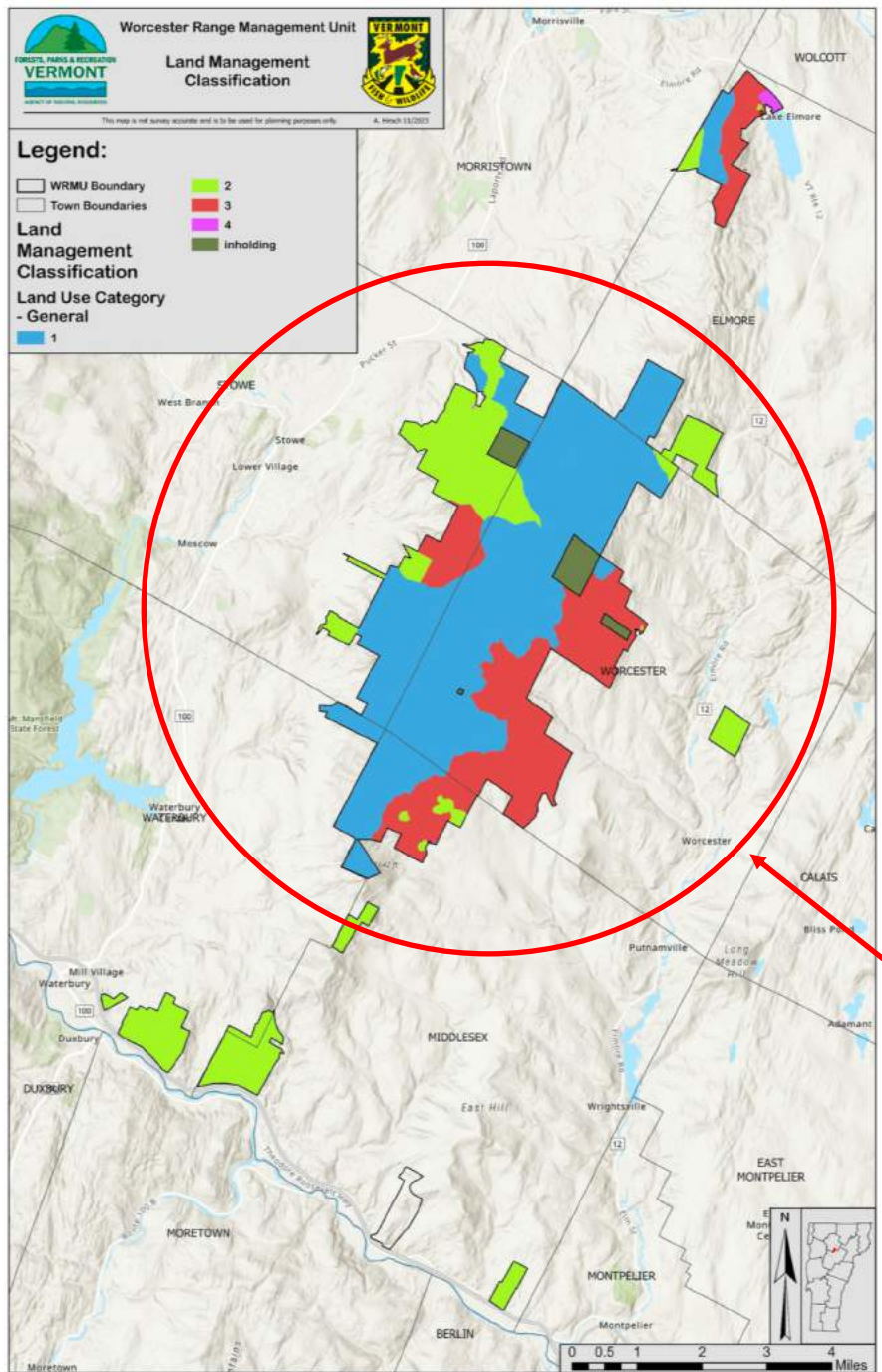
- There is no timber harvest “mandate.” **10 V.S.A. § 2603** says that the Commissioner of FPR “may may sell forest products and other resources on public lands and shall administer the State park system and a community recreation program as is in the best interests of the State and is consistent with the purposes and policies of this chapter” [emphasis added].
- “The Commissioner, subject to the direction and approval of the Secretary, shall adopt and publish rules in the name of the Agency for the use of State forests, or park lands, including reasonable fees or charges for the use of the lands, roads, camping sites, buildings, and other facilities and for the harvesting of timber or removal of minerals or other resources from such lands” [emphasis added].

Statutory authorities and responsibilities of VT ANR: 10 V.S.A. § 2601



- It is the policy of the State to ensure that “floods and soil erosion are alleviated, ...impairment of its dams and reservoirs is prevented, ...and the health, safety, and general welfare of its people are sustained and promoted” (10 V.S.A. § 2601)
- In the draft WRMU LRMP, VT ANR argues that “Inclusion [of a Water Resource and Flood Resiliency Assessment] [is] at [the] discretion of [the] Stewardship Team. Not currently required. Size and complexity of parcel and watershed condition are factors that could influence inclusion” (p54).
- The draft WRMU LRMP makes no attempt to analyze flood impacts or phosphorus loading

Map 36: Land Management Classification – General LUC of WRMU

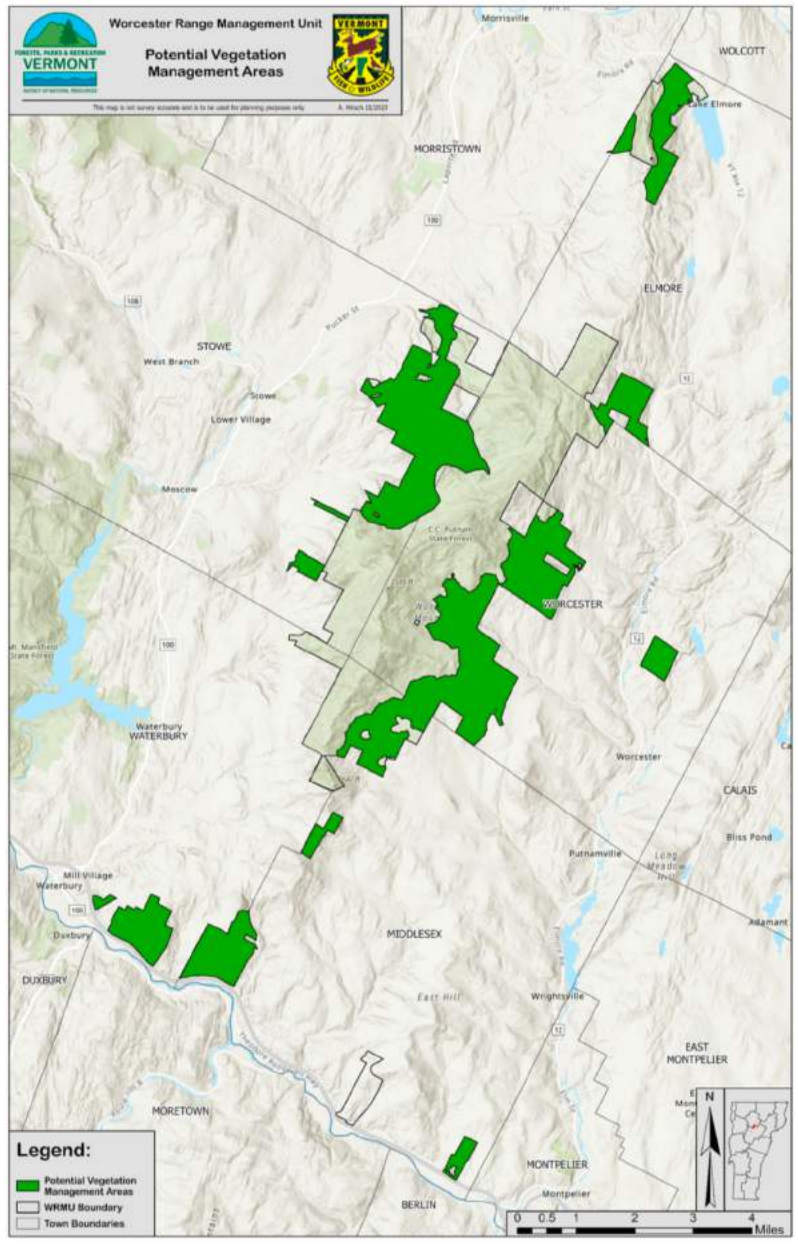


Overview of ANR's proposed Worcester Range land management classifications:

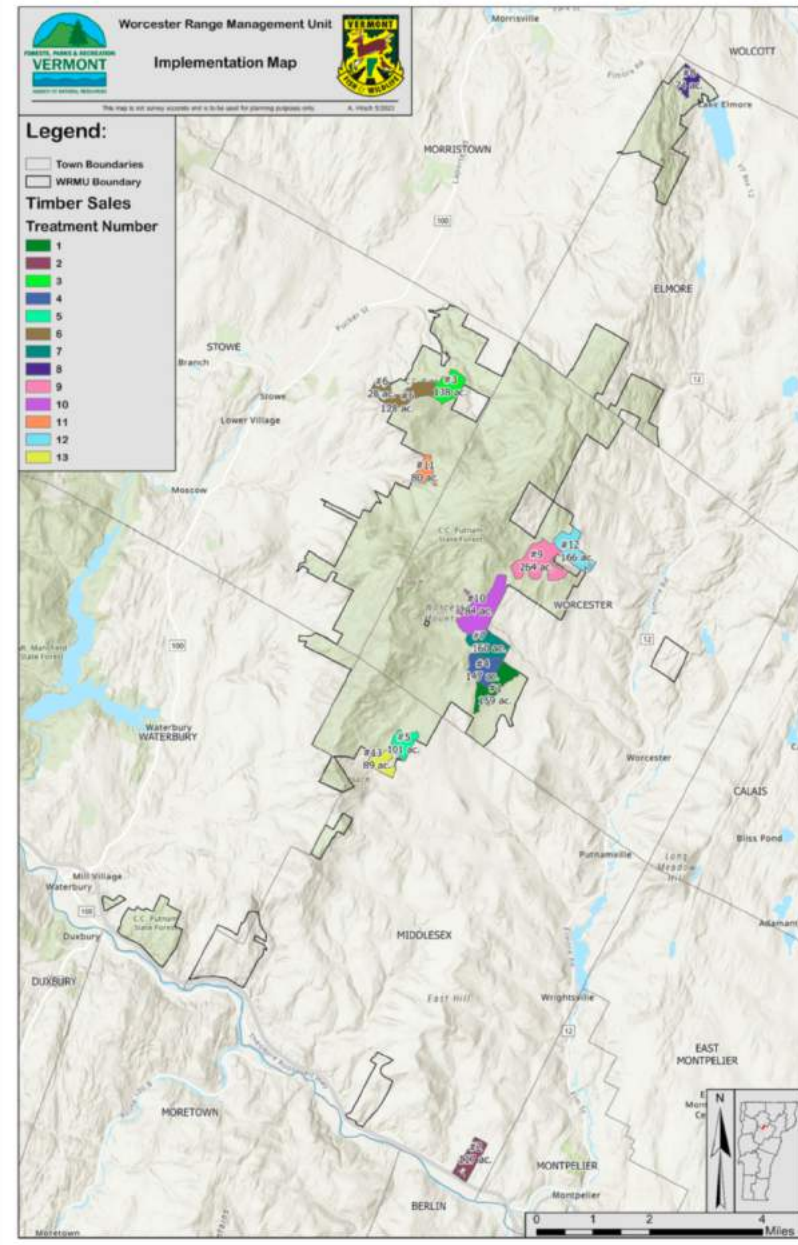
- **Blue: Highly Sensitive Management**
 - (9,650.8 acres)
- **Light Green: Special Management**
 - (4,250.0 acres)
- **Red: General Management**
 - (4,542.8 acres)
- **Purple: Intensive Management**
 - (54.8 acres)
- **Dark Green: Private inholdings**

This 15,600-acre block of contiguous state land is the largest functional wildland in any ownership north of I-89 in Vermont

Map 17: Potential Vegetation Management Areas



Map 42: Timber Implementation



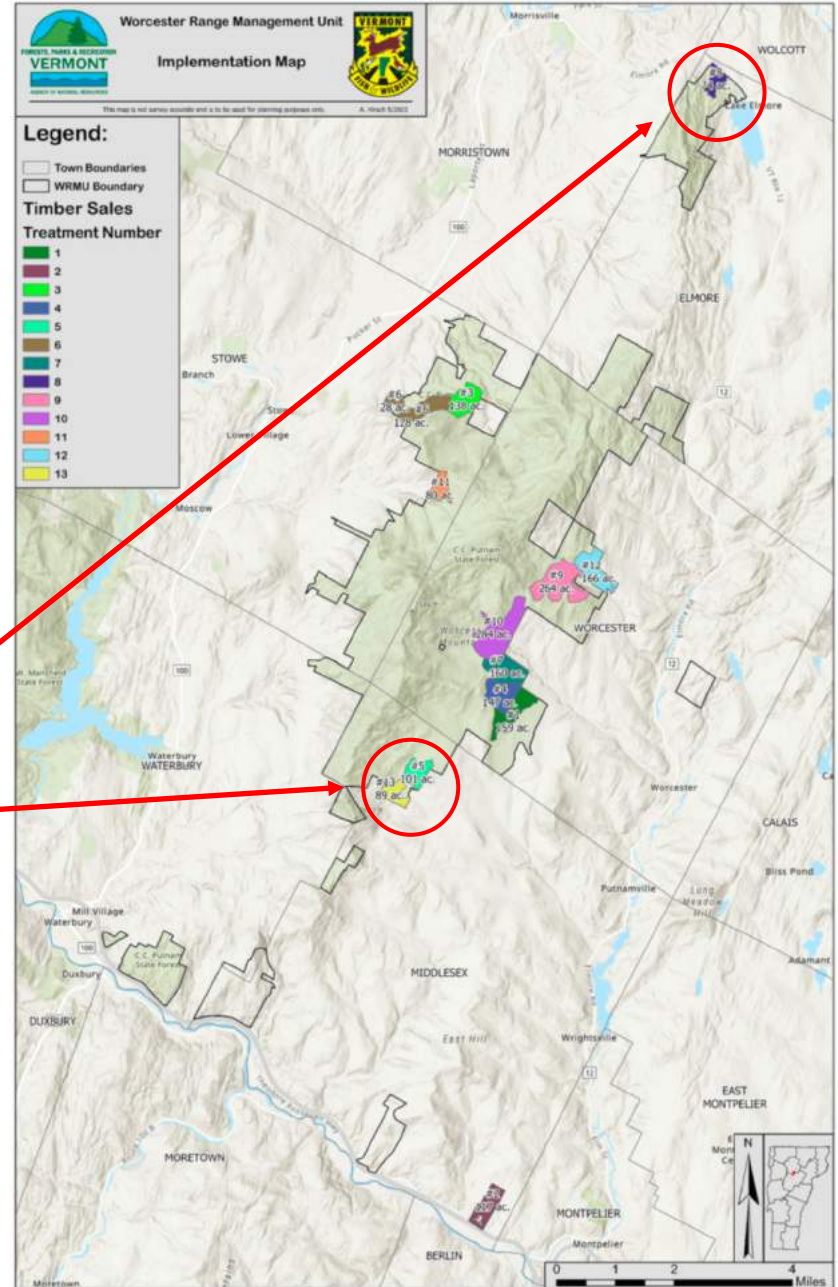
Lands proposed for harvest in the 20-year plan time horizon: 1,935 acres, or 20% of the lands available for timber management, concentrated in low-elevation areas.

Table 29: Commercial Vegetation Management Schedule (2025-2042)

Treatment #	Schedule	Acres	ANR Unit	Forest Type	Management
#1	2025	159	C.C. Putnam State Forest	Sugar Maple-Beech-Yellow Birch	uneven-aged
#2	2026	103	C.C. Putnam State Forest	Hemlock-Yellow Birch	uneven-aged
#3	2028	138	C.C. Putnam State Forest	Sugar Maple-Beech-Yellow Birch; Hemlock-Yellow Birch	uneven-aged
#4	2029	147	C.C. Putnam State Forest	Red Spruce-Sugar Maple-Beech	uneven-aged
#5	2031	156	C.C. Putnam State Forest	Sugar Maple-Beech-Yellow Birch	uneven-aged
#6	2032	128	C.C. Putnam State Forest	Sugar Maple-Beech-Yellow Birch	uneven-aged
#7	2033	160	C.C. Putnam State Forest	Red Spruce-Sugar Maple-Beech	uneven-aged
#8	2034	49	Elmore SP	Paper Birch	uneven-aged
#9	2036	264	C.C. Putnam State Forest	Sugar Maple-Beech-Yellow Birch	uneven-aged
#10	2037	284	C.C. Putnam State Forest	Sugar Maple-Beech-Yellow Birch	uneven-aged
#11	2039	80	C.C. Putnam State Forest	Sugar Maple-Beech-Yellow Birch	uneven-aged
#12	2040	101	C.C. Putnam State Forest	Sugar Maple-Beech-Yellow Birch	uneven-aged
#13	2042	89	C.C. Putnam State Forest	Sugar Maple-Beech-Yellow Birch; Red Spruce, Sugar Maple, Beech	uneven-aged

Harvests are planned in Elmore State Park and within lands recently acquired through the Hunger Mountain Headwaters Project

Map 42: Timber Implementation



STOWE LAND TRUST

Our Work • About • Get Outside • News & Events • Support • [Donate](#)

Home / News & Events / News & Stories

Latest News

Hunger Mountain Headwaters Conserved

Boucharde Farm and Landmark Meadow in the News - Update News — 1/12/24

Naturalist Corner: A Timely Winter Gift
Wildlife Viewing — 1/4/24

Updates from the Stew Crew
Hiking — 1/3/24

Transitions and Gratitude: A Message Regarding Our Executive Director
News — 12/13/23

Posted Tuesday, April 14, 2020
— PRESS, HUNGER MOUNTAIN HEADWATERS

The C.C. Putnam State Forest just got considerably bigger and the Worcester Range is now safer thanks to a collaborative effort and \$3.5 million in public and private financing.

The Trust for Public Land, working in conjunction with the Stowe Land Trust and the state Department of Forests, Parks and Recreation announced the protection of the "Hunger Mountain Headwaters" - 1,877 acres of land in Stowe, Middlesex and Worcester - this week.

View from the top of Hunger Mountain, one of the most popular day hikes in central Vermont.



What else is missing from this plan?

- Abenaki input.
- Act 59 – The Community Resilience and Biodiversity Protection Act
- Global Warming Solutions Act and VT Climate Action Plan
- Lake Champlain TMDL
- Recovery plan for Vermont's rare, threatened, and endangered species

Old, intact forests enhance water quality and protect downstream communities from flooding



Enhancing Flood Resiliency of Vermont State Lands

30 June 2015 FINAL DRAFT

Prepared under contract to

Vermont Forests, Parks & Recreation
Montpelier, Vermont

Prepared by:



Kristen L. Underwood, PG, MS Geosciences
South Mountain Research & Consulting
Bristol, Vermont



David Brynn, BS Forestry & MS Natural Resources Planning
Vermont Family Forests
Bristol, Vermont

- *“There may be a tendency to assume that lands in forest cover are resilient to the effects of flooding simply by virtue of their forested status. **However, forest cover does not necessarily equate to forest health and forest flood resilience...**” [emphasis added].*
- *“**The quality of [today’s] forests is not the same as the pre-Settlement old growth forests. The legacy of early landscape development and a history of channel and floodplain modifications continue to impact water and sediment routing from the land [emphasis added].**”*
- *“**[AMPs] are not designed to enhance flood resiliency** specifically, or to address more extreme storm conditions experienced with greater frequency in recent years and anticipated in coming decades.”*



Enhancing Flood Resiliency
of Vermont State Lands

30 June 2015 FINAL DRAFT

Prepared under contract to

Vermont Forests, Parks & Recreation
Montpelier, Vermont

“General Comments from District III Stewardship Team”

“If flood resiliency was the highest or only priority for management, the concepts and practices contained in the report could be effective at increasing flood resiliency on state lands...”

“Fully adopting the recommendations in this report, as written, will completely gut FP&R’s long standing State lands silvicultural timber management program...by taking tens of thousands of acres out of active management.”

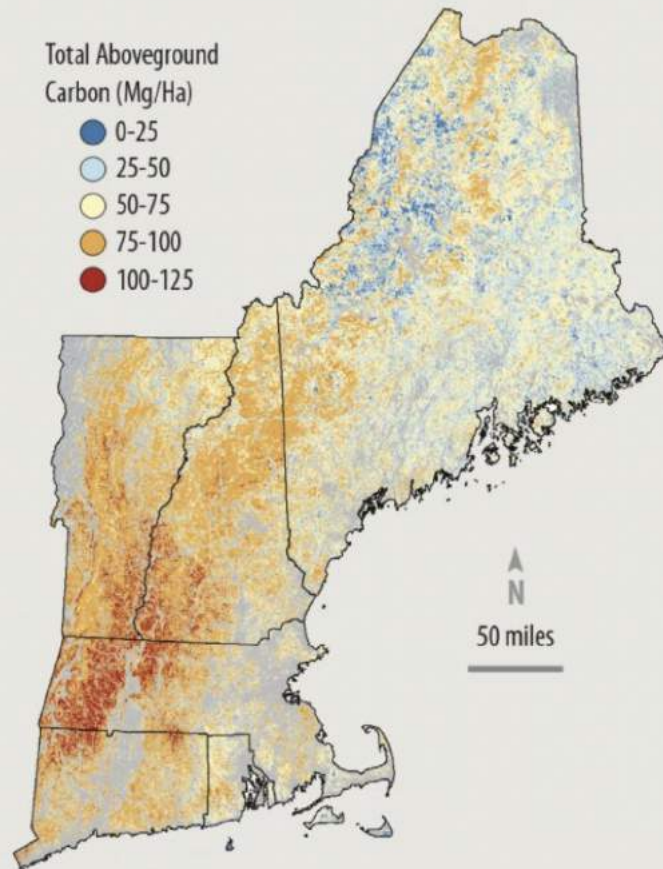
“If flood resiliency is that critical, and there is no other way to accomplish it, then that is fine. I just want to be sure that those who make the decisions on these matters understand the impacts it will have. My biggest fear is that this report will somehow be adopted as policy by ANR leadership while FPR will be expected to continue to manage state lands as usual with a few tweaks to our methodology. That will not be possible.”



Public lands in
New England
store, on average,
30% more
aboveground
biomass
than private lands

From "Relationships Between Major Ownerships, Forest Aboveground Biomass, Distributions, and Landscape Dynamics in the New England Region of USA" (Zheng et al 2009)

Forests Store Carbon



New England's forests provide a vast store-house of carbon that helps mitigate global climate change. Variation in the amounts of carbon, wood, and the size of trees across the region is largely due to the history of timber harvesting. Data are not represented for gray areas that are predominantly agricultural or densely populated.

Source: *Wildlands and Woodlands 2017*

1370

J.S. Nunery, W.S. Keeton / Forest Ecology and Management 259 (2010) 1363–1375

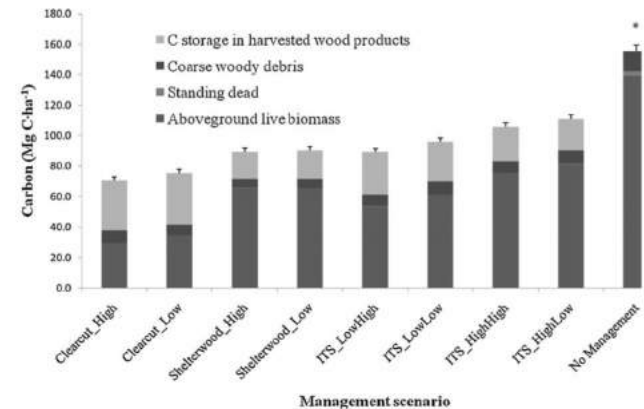


Fig. 3. Comparison of mean C stocks in nine different management scenarios. Error bars show + one standard error of the mean. For management scenario descriptions refer to Tables 2 and 3. Asterisk notes significant difference ($p < 0.01$) between active and passive management scenarios. Significant differences between active management treatment effects are described in Table 7.

Studies by UVM researchers show that New England's forests could store **2-4 times more** carbon than present levels if allowed to grow old.

VERMONT CONSERVATION DESIGN

PART 2: NATURAL COMMUNITIES AND HABITATS

TECHNICAL REPORT



March 2018

Robert Zaino, Eric Sorenson, Doug Morin, Jens Hilke – Vermont Fish and Wildlife Department
Keith Thompson – Vermont Department of Forests, Parks and Recreation



“The native species of Vermont evolved in a landscape dominated by old forest...the closer the target is to the historic old forest condition, the greater the likelihood that the landscape will support all of Vermont’s native forest species and fully provide the forest’s ecological services.”

“Although there are small patches of old growth scattered around the state, old forest is absent in Vermont as a functional component of the landscape. In most forests, passive restoration will result in old forest conditions.”

“4,000-acre minimum patch sizes are preferred as they are most likely to accommodate large-scale natural disturbance events.”

Average annual removals of sound bole volume of trees (at least 5 inches d.b.h./d.r.c.), in cubic feet, on forest land

State code	Total	National Forest	Other federal	State	County and Municipal	Private	Other
Total	872,713,151	4,368,415	276,380	28,284,608	9,153,306	766,860,712	63,769,730
09 Connecticut	17,529,469	-	-	6,639,638	-	5,821,031	5,068,800
23 Maine	636,807,219	-	276,380	15,134,050	4,508,463	586,249,356	30,638,970
25 Massachusetts	25,336,243	-	-	2,532,676	1,005,873	15,254,233	6,543,462
33 New Hampshire	112,003,846	3,331,728	-	2,415,113	3,021,688	96,048,823	7,186,495
44 Rhode Island	4,635,737	-	-	-	617,281	2,480,504	1,537,951
50 Vermont	76,400,637	1,036,687	-	1,563,132	-	61,006,766	12,794,052

- **State lands provide just ~2% of the timber harvested each year in Vermont, on average**
- **Every year, on average, Vermont harvests ~50% more wood than is consumed within Vermont**

Source: USDA Forest Service, Forest Inventory and Analysis Program, Tue Feb 15 15:09:37 GMT 2022. Forest Inventory EVALIDator web-application Version 1.8.0.01. St. Paul, MN: U.S. Department of Agriculture, Forest Service, Northern Research Station. [Available only on internet: <http://apps.fs.usda.gov/Evalidator/evalidator.jsp>]



There is no rush to complete the Worcester Range management plan.

Vermont's environment and its communities deserve better.

The legislature can intervene by requiring rules to be promulgated before any long-range management plans are finalized, and before any timber sales are approved.

A photograph of a forest. In the foreground, a large, dark tree trunk with rough bark is visible on the left side. The background is filled with trees, some with bright yellow autumn leaves and others with green foliage. The sky is visible through the canopy.

Thanks

Zack Porter

Standing Trees

zporter@standingtrees.org

802.552.0160